IDRC FEATURE

A monthly features service about science, technology, and development

Approx. 750 words IDRC-194e

CUTTLEFISH FEVER

by Aliou Barry

SENEGAL, IDRC -- Two-thirty in the afternoon is not the "rush hour" on the beach at Mbour, a fishing village, 75 kilometres south of Dakar. It will be five o'clock before the beach is overrun by a crowd made up primarily of fishermen's wives come to meet their husbands as they dock, or to buy fish. Still, the southern end of the beach is already bustling with activity; some dugout canoes have just unloaded their catch, and there are many vehicles waiting nearby to take the fish to Dakar. This section of the beach is reserved for unloading cuttlefish, which have recently given rise to a booming trade.

Moussa Bakhayokho, a biologist at the Dakar-Thiaroye oceanographic research centre (CRODT), specializing in research on cephalopods, cuttlefish among them, calls it "cuttlefish fever". About 300 motorized dugouts and some of Senegal's largest fishing vessels are now involved in cuttlefishing, but 10 years ago, no one was interested. Trawlers began to fish for them in 1973 and within a couple of years, the inshore fishermen also began to do so.

Cuttlefish, octopus and squid, which are all cephalopod molluscs, now represent one percent of Senegal's total catch - about 3,000 tonnes. However, in terms of their market value, they account for 10 percent of

INTERNATIONAL DEVELOPMENT RESEARCH CENTRE ● Communications Division, Box 8500, Ottawa, Canada, K1G 3H9
Telephone (613) 996-2321 ● Cable: RECENTRE ● Telex: 053-3753

Senegal's fishery production. This profitability explains the keen interest in the cephalopods and especially in cuttlefish, which make up 95 percent of the catch. Cuttlefishing also takes less time; fishermen come home as early as two o'clock in the afternoon, whereas those fishing for other species do not return before five. Interest in this type of fishing was slow to develop, however, because people in Senegal do not eat cephalopods. Cuttlefishing also requires a special technique introduced to Senegal only recently by the Japanese.

The coasts of Senegal abound in cuttlefish, and mollusc fishing is a source of considerable revenue, especially since the market seems likely to remain very favourable for a long time to come. Because demand far exceeds supply, the mollusc trade affords a handsome profit, and prices continue to skyrocket. In 1976, a tonne of cuttlefish cost $1000; in 1981, it cost over $5000. In social terms, cuttlefishing employs a large workforce, especially young people, who were the first to show an interest in this new activity. More and more fishermen are turning away from other species to concentrate on fishing for cephalopod molluscs.

According to Moussa Bakhayokho, this interest makes it important to assess cuttlefish stocks to ensure their rational exploitation. This is where research comes in: a knowledge of cuttlefish biology is becoming indispensable. The researcher's task is not an easy one, since the methods of studying fish employed until now are not always suited to cuttlefish. However, in the future it will be possible, for instance, to develop techniques for assessing cuttlefish stocks. It is known that they grow very quickly and reproduce all year long, unlike some other species. Since the cuttlefish has a short lifespan of only two or three years, it is important to know where to find the biggest specimens before they die of exhaustion or old age.

Two freezer factory vessels (the largest in the country) and six freezer trawlers are used for industrial fishing. This fleet brings in an excellent catch, given the size of its nets. But because the cuttlefish's fertility rate is very low, there is a real danger of overfishing, especially as industrial fishing destroys many eggs and catches many cuttlefish which have not yet reproduced. Moussa Bakhayokho suggests that trawling along a stretch of the coastal fringe be prohibited during at least part of the main spawning season from February to May. The inshore fishery is selective. The fishermen use cages, jiggers and hooks; in this way, they avoid catching immature specimens.

Fishermen must improve their techniques in order to increase their catch, says the researcher. Cooperation with the Japanese would be a very useful means to this end. All the cuttlefish caught in Senegal is exported to Japan and effective cooperation between the two countries has already been established. Many Senegalese vessels are commanded by Japanese, who are sending more and more Senegalese to Japan to learn the specialized fishing techniques. Senegal's two cuttlefish processing plants also send trainees to Japan each year. Optimism concerning the future of this type of fishing thus seems well-founded.

- END -

Jan.-Feb. 1982